

A2  
Cancelled

trenches are located centered opposite each other, one of the conductor trenches having smaller dimensions than the other conductor trench.

P3  
14. (Amended) The circuit board according to claim 13, characterized in that the

space between the conductor trenches (12) located opposite each other is filled with air.

15. (Amended) The circuit board according to claim 1, characterized in that a cooling groove (20) is provided on at least one of the individual layers, the cooling groove being filled with a metallization (18) of a thickness such that a heat sink is formed.

16. (Amended) The circuit board according to claim 1, characterized in that a cooling channel (34) is provided on at least one of the individual layers, the cooling channel being adapted for a cooling agent (36) to be conducted therethrough, and that the other individual layer covers the cooling channel.

18. (Amended) The circuit board according to claim 1, characterized in that at least one mount (26) for an electronic, optical or optoelectronic component (28) is provided in at least one of the individual layers.

20. (Amended) The circuit board according to claim 1, characterized in that the two individual layers are connected with each other by an electrically conductive material (24).

P4  
22. (Amended) The circuit board according to claim 1, characterized in that at least one of the individual layers consists of an optically transparent material and that on this individual layer a waveguide trench (42) is provided which is filled with an optically transparent material the refractive index of which suitably differs from that of the material of the individual layer (10), so that a waveguide (40) is formed.

P7  
25. (Amended) A method of manufacturing a circuit board (5), comprising the

following steps:

A7  
concluded

at least two individual layer blanks (110) are produced by formation from a casting, each of the blanks being provided with positioning formation preforms (116) on first and second functional sides; the individual layer blanks (110) are subjected to a pretreatment on their entire surface such that they can be provided with a metallization; in those regions which are not intended to be provided with a metallization, the surface is subjected to a subsequent treatment, so that no metallization is deposited in these regions; a metallization (18) is applied to the regions which have not been subjected to a subsequent treatment; the individual layer blanks are placed on top of one another and at the same time precisely positioned in relation to each other by means of the positioning formations (16).

30. (Amended) The method according to claim 29, characterized in that the individual layers (10) are injection-molded.

Respectfully submitted,

  
Daniel C. McEachran  
Registration No. 19,804

Cook, Alex, McFarron, Manzo, Cummings & Mehler, Ltd.  
200 West Adams Street - Suite 2850  
Chicago, IL 60606  
(312) 236-8500  
May 14, 2001  
(Attorney's Docket: Prinz Case 109)